

Title (en)

SOFT TISSUE HEATING APPARATUS WITH INDEPENDENT, COOPERATIVE HEATING SOURCES

Title (de)

VORRICHTUNG ZUM ERHITZEN WEICHER GEWEBE MIT UNABHÄNGIGEN, KOOPERIERENDEN HEIZQUELLEN

Title (fr)

APPAREIL CHAUFFANT LES TISSUS MOUS A SOURCES DE CHAUFFAGE INDEPENDANTES COOPERANTES

Publication

EP 1173122 A1 20020123 (EN)

Application

EP 00921814 A 20000407

Priority

- US 0009219 W 20000407
- US 28945999 A 19990409

Abstract (en)

[origin: WO0061042A1] This invention is a medical probe (10) for the heating of soft tissue, such as collagen tissue, wherein the medical probe has a elongated body (12) with a proximal, a distal end, a heating source (16), and an RF electrode (14). Optional components include a thermocouple (24), and an insulating sleeve (20). The probe's elongated body is preferably hollow, and flexible. The RF electrode and the heating source are powered by independently controlled power sources (17, 21), cooperate to maintain a constant and smooth temperature to the distal end of the RF electrode. The heating source may be a contained liquid, such as saline, or an electro-thermal mass, such as a ferrite (36), a toroid, a resistive element (40), or the like. Current induced from the conductor (24) to the heating source creates heat in the heating source. The thermocouple measures the temperature of the heating source, and adjusts the power to the conductor to maintain the heating source's temperature.

IPC 1-7

A61B 18/14; **A61B 18/08**

IPC 8 full level

A61B 18/08 (2006.01); **A61B 18/14** (2006.01); **A61F 7/00** (2006.01); **A61N 1/06** (2006.01)

CPC (source: EP US)

A61B 18/148 (2013.01 - EP US); **A61B 18/1492** (2013.01 - EP US); **A61B 2018/00005** (2013.01 - EP US); **A61B 2018/00714** (2013.01 - EP US); **A61B 2018/00791** (2013.01 - EP US); **A61B 2018/00815** (2013.01 - EP US); **A61B 2018/1253** (2013.01 - EP US)

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

WO 0061042 A1 20001019; AU 4208100 A 20001114; DE 60044345 D1 20100617; EP 1173122 A1 20020123; EP 1173122 A4 20050907; EP 1173122 B1 20100505; JP 2002540894 A 20021203; JP 4175776 B2 20081105; US 6358273 B1 20020319

DOCDB simple family (application)

US 0009219 W 20000407; AU 4208100 A 20000407; DE 60044345 T 20000407; EP 00921814 A 20000407; JP 2000610380 A 20000407; US 28945999 A 19990409